

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS

DRAFT

Conditional Major, Construction / Operating

Permit: F-08-017

Sweco, Division of M-I, LLC.

P.O. Box 1509 Florence, KY 41022-1509

05/14/08

Yelena Goldin, Reviewer

SOURCE ID: 21-015-00102

AGENCY INTEREST: 254

ACTIVITY: APE20080001

SOURCE DESCRIPTION:

On April 9, 2008, the source applied to the Division for the construction/operation of the new emission points (EP#06 and EP#07) at the facility in Florence, Kentucky for the manufacturing and repairing of high quality filtration machinery and filtration screens for various industries.

SWECO will install a large paint booth (EP#06) and an infrared curing oven (EP#07), which will be performed in conjunction with the removal of the existing paint booth, EP#04. SWECO will also make modifications to their current insignificant activity operations.

The addition of the new emission points resulted in changing the status of this facility from being a minor source (S-04-047) to major source (F-08-017). Potential emissions of Toluene and Xylene, a hazardous air pollutants (HAP), as well as combined HAPs from the new emission points will exceed 10 tons per year for individual HAP and 25 tons per year for combined HAPs. Thus, the SWECO facility would be classified as a major source under the Title V permit program. However, the facility voluntarily accepted permit limitations of source-wide HAPs emissions of less than 9 tpy of individual HAP and 22.5 tpy of total HAPs to be classified as a Conditional Major.

COMMENTS:

The paint booth will be the oilfield equipment paint spray booth and will include existing high volume low pressure (HVLV) Binks SV100 spray gun, a particulate filtration system, and an infrared curing oven. The paint booth will vent to the atmosphere through two identical stacks. Emissions of volatiles from coatings applied and thinners are determined by material balance assuming all volatiles are emitted. Emissions of particulate matter are determined assuming a 35 percent overspray of coating and a minimum control efficiency of 90 percent. All particulate emissions are assumed to be captured in the enclosure.

EMISSION AND OPERATING CAPS DESCRIPTION:

The paint booth is subject to the opacity and particulate mass emission rate standards specified in 401 KAR 59:010, New Process Operations. The opacity of emissions from a control device or stack shall not exceed 20 percent based on a 6 minute average (24 observations at 15 second intervals).

EMISSION AND OPERATING CAPS DESCRIPTION (CONTINUED):

The emission rate of particulate matter from a control device or stack shall not exceed 2.34 pounds per hour. The emission rate of individual hazardous air pollutants (HAP) and combined HAP shall not exceed 9.0 tons and 22.5 tons respectively for any twelve (12) consecutive month period. These emission limits shall preclude the applicability of 40 CFR 63, Subpart M - NESHAPs for surface coating of miscellaneous metal parts and products. The emission rate of volatile organic compounds shall not exceed 18 tons for any twelve (12) consecutive month period. This emission limit shall preclude the applicability 401 KAR 59:225, New miscellaneous metal parts and products surface coating operations, applicable to affected facilities commenced on or after June 24, 1992, which are part of major source located in county or portion of a county designated attainment or marginal nonattainment for ozone in 401 KAR 51:010.

PERIODIC MONITORING:

Compliance with the opacity standard will be demonstrated by the permittee conducting weekly visible emission observations of the stacks. If visible emissions are seen, the permittee will be required to either shut the process down and take corrective actions or perform an EPA Method 9 reading to determine the opacity of emissions. If the opacity determined by the Method 9 reading is less than 20 percent, the process may continue to operate, otherwise the process must be shut down and repairs to control equipment initiated.

Compliance with the mass standard will be assumed when filters and particulate control equipment are in place and operating efficiently. The permittee will be required to monitor filter condition weekly and record filter replacements, including the date and time of the replacement.

The permittee will be required to monitor and record the gallons of coating as applied used on a monthly basis. Additionally the permittee will be required to monitor and record the gallons of individual materials used, which contain VOC and HAP on a monthly basis. The permittee shall calculate and record the monthly and 12-month rolling total emissions of individual HAP, combined HAP and VOC.

OPERATIONAL FLEXIBILITY: N/A

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.